## Standards for Attachment Of

Small Wireless Facilities
On

# Roseville Traffic Signal Facilities

Draft

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#### Small Wireless Facilities on Roseville Traffic Signal Facilities

#### 1. Purpose

1.1. This specification provides an outline for the various requirements for the attachment of small wireless facilities (SWF) to Roseville Traffic Signal (RTS) facilities located in the public right-of-way (ROW). Compliance with the following is necessary to install any SWF on RTS facilities. This specification does not include facilities in the city limits of Roseville not owned by the City of Roseville or facilities not located in the ROW.

#### 2. Scope

- 2.1. This specification document is intended to provide minimum appearance and design requirements.
- 2.2. RTS facilities for attachment in this specification include the following: steel poles and street light poles at Roseville's signalized intersections.
- 2.3. Small wireless facilities shall not be installed on RTS facilities with pre-existing wireless antennas, radar, microwave, video monitoring equipment, or those that have been preselected for installation of these devices. SWF installations are permitted on other RTS poles in the intersection providing it does not interfere with traffic signal equipment.
- 2.4. Small wireless facilities shall not be installed in such a manner as to obstruct access to the pole top inspection / construction caps.
- 2.5. Pursuant to 47 CFR section 1.1312(e)(2) of FCC Title 47, small wireless facilities are facilities that meet each of the following conditions: The facilities (i) are mounted on structures 50 feet or less in height including their antennas as defined in 47 CFR section

- 1.1320(d); or (ii) are mounted on structures no more than 10 percent taller than other adjacent structures, or (iii)
- 2.5.1. do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is lesser;
- 2.5.2. each antenna, all associated antenna support structures, and mounting hardware with the deployment, excluding associated antenna equipment (as defined in the definition of antenna in 47 C.F.R. section 1.1320(d)), is no more than 3 cubic feet in volume;
- 2.5.3. All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure is no more than 28 cubic feet in volume;
- 2.5.4. The facilities do not require antenna structure registration under part 17 of 47C.F.R. Chapter I;
- 2.5.5. The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 CFR section 1.1307(b).
- 2.5.6. No facility shall bear any signs or advertising devices other than certification, warning or other signage required by law or permitted by the city.

#### 3. General Requirements

3.1. All installations must not violate any requirements set forth by the California Public Utilities Commission General Order 95 (GO95). All applicable State, Federal and local orders must be followed.

- 3.2. All installations must not interfere with the safe working space requirements or access to traffic signal equipment on the RTS facilities.
- 3.3. Calculations must be provided to Roseville Traffic Engineering along with the application that demonstrate the ability of the RTS facility to safely accommodate the SWF installation. Calculations and all appropriate drawings must be stamped by the appropriate Professional Engineer registered in California.
- 3.4. Only one pole top antenna structure will be allowed per RTS facility.
- 3.5. Only one SWF installation allowed per wireless carrier per signalized intersection.
- 3.6. Small wireless facilities or support structures shall not be installed in such a manner as to obstruct the visibility or operation of any traffic signal display, detection sensors, Opticom detectors, traffic monitoring cameras, or signs.
- 3.7. All SFW facilities shall have subdued colors and non-reflective materials that blend with the materials and colors of the surrounding area and structures. SWF installations mounted to decorative poles shall be of matching color.
- 3.8. SFW installations shall be designed and maintained as to minimize visual, noise and other impacts on the surrounding community.
- 3.9. All network communications and power shall have a means of disconnection at the pole so that maintenance workers can turn off the antennae and accessory equipment while working on the pole.
- 3.10. SWF antenna radiation must at all times be within FCC and US OSHA limits.
- 3.11. All facilities shall be designed and located in such a manner as to avoid adverse impacts on traffic safety including sight distance requirements, traffic control and sign

visibility, Americans with Disabilities Act ("ADA") requirements, and minimum road clearances.

#### 4. Standards

- 4.1. All installations must comply with the latest editions, errata, corrections and amendments to the following standards:
  - 4.1.1. City of Roseville Municipal Code
  - 4.1.2. California Electric Code
  - 4.1.3. CPUC General Order 95
  - 4.1.4. National Electric Safety Code NESC
  - 4.1.5. United States Department of Labor Occupational Safety and HealthAdministration Telecommunications 1910.268
  - 4.1.6. Caltrans Standard Plans and Specifications
  - 4.1.7. City Improvement and Construction Standards
  - 4.1.8. California Manual on Uniform Traffic Control Devices (CMUTCD)

#### 5. Aesthetic Requirements for Traffic Signal and Streetlight Poles

- 5.1. All wiring must be installed within the streetlight or traffic signal pole and must not be visible.
- 5.2. All SWF installations shall have a compact footprint and be as close to flush mount as possible.
- 5.3. No overhead wire shall be strung for SWF installations.

- 5.4. No facility may be illuminated unless specifically required by FAA or other government agency. Beacon lights are not permitted unless required by the FAA or other government agency.
- 5.5. Any required lighting shall be shielded to eliminate, to the maximum extent possible, impacts on the surrounding neighborhoods, and must not be visible to the motoring public.

- 6. Permitting
  - 6.1. (Future)
- 7. Electrical Supply Guidelines
  - 7.1. (Future)
- 8. Safety and Tagging
  - 8.1. (Future)